EXHIBIT C

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American Board of Internal
Medicine and Pulmonary Disease

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Mr. Alan Brayton
Brayton-Purcell
222 Rush Landing Road
P. O. Box 6169
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RE: BARRY KELLY

Dear Mr. Brayton:

Thank you for referring Mr. Kelly for my evaluation. He was seen on November 21, 2011. He is 60 years of age. He lives in Ft. Worth, Texas.

Mr. Kelly was well until approximately August 2010 when he developed what he thought was a cold. He developed coughing and aching. He went to see his primary care physician who gave him an antibiotic. He thinks he got a Z-pak. Several weeks later he returned for evaluation because he was no better and was given additional medication. He does not specifically recall what he was given. It included a cough syrup.

Over the next several months, his symptoms persisted and in October 2010 he was referred to Dr. Bizmar, a pulmonologist in practice in Ft. Worth. Dr. Bizmar thought that he had a post viral syndrome and gave him a metered dose inhaler. He also had pulmonary function tests done. Mr. Kelly was not told that the pulmonary function tests were abnormal.

In December 2010 he had a CT scan of the chest performed. The results were abnormal. He did not learn about the results until January.

In late December he was in Shreveport, Louisiana and noticed the onset of considerable fatigue. He was unable to do much of anything.

In January 2011 he returned to see the pulmonologist in followup. The pulmonologist told him that there was nothing much wrong with the lung. The CT scan demonstrated fluid in the abdomen. At that point, an abdominal CT scan was ordered. He was then referred to a gastroenterologist.

The gastroenterologist was Dr. Bizmar's brother, who is also in practice in Ft. Worth.

Right around this time, he noted abdominal bloating. He was sent for a paracentesis. No diagnosis was made.

He was then sent to a liver specialist for evaluation. There was concern that he had liver disease or pancreatic disease. He was evaluated to rule out disease of these organs and others.

Around this time he was also sent to a kidney specialist because his creatinine was elevated. The nephrologist noted that his kidney function was stable over several years. He did a sonogram of the kidneys and told Mr. Kelly that the kidney was not the source of the ascites.

He was also referred to an infectious disease specialist. The infectious disease specialist ordered a lot of blood tests. All of the test results were negative and he had no explanation for the ascites.

In February 2011 he had another paracentesis. No diagnosis was made.

In late March 2011 the liver specialist decided that an omental biopsy should be performed. The biopsy was done at Baylor All Saint's Hospital in Ft. Worth. He was diagnosed with malignant mesothelioma.

Mr. Kelly was then referred to Dr. Ganesa, an oncologist in Ft. Worth. He saw Dr. Ganesa in early April 2011. The oncologist indicated that she never saw a case before and recommended that he be seen at MD Anderson Cancer Center. She pointed out that she could do chemotherapy in Ft. Worth under the direction of MD Anderson.

In early May 2011 Mr. Kelly was seen at MD Anderson Cancer Center by Dr. Fournier and a physician assistant. He had blood tests done and he had CT scans performed. He thinks he also had a chest x-ray. Several days later he was seen in followup by Dr. Fournier. The standard treatment at MD Anderson Cancer Center is to do surgery with heated intraoperative chemotherapy. Dr. Fournier indicated that he had impaired kidney function and diabetes and there was concern that the chemotherapy would put him into renal failure requiring dialysis. As a result, the physicians at MD Anderson Cancer Center did not recommend that he have surgery. He was also offered the names of two medical oncologists to see. One was Dr. Hedy Kindler at the University of Chicago. He was also given the name of an oncologist in Albuquerque who was actually moving to Washington, DC.

Mr. Kelly saw Dr. Kindler in June 2011. Dr. Kindler had a CT scan performed and blood tests done. She agreed that he was not a good candidate for intraoperative chemotherapy. She recommended chemotherapy with carboplatin and Alimta. She indicated that it could be administered in Dallas under the direction of a colleague of hers, Dr. Dowell, at the University of Texas Southwestern Medical Center. She then would like to see him in followup after every three cycles of treatment to see how he was doing.

Mr. Kelly was seen by Dr. Dowell in late June. He agreed to begin Mr. Kelly on chemotherapy with carboplatin and Alimta. Chemotherapy began in late June 2011. He received carboplatin and

Alimta. He returned three weeks later and received the same drugs again. He received the third course of treatment three weeks after than. With treatment his hemoglobin fell. His white blood count also fell. His renal function remained approximately the same.

He developed some nausea from treatment. He developed mouth sores. He had ongoing fatigue.

In late August he went to Chicago to be re-evaluated by Dr. Kindler. He actually drove from Texas to Chicago which took two days. While he was on the trip he noticed the onset of nosebleeds. During his evaluation at the University of Chicago, he had a CT scan done. He was given intravenous contrast. Following this, he had a substantial amount of bleeding from the intravenous site. He went to see Dr. Kindler and she diagnosed him with leukopenia, anemia and thrombocytopenia and hospitalized him at the University of Chicago. He was in the hospital for ten days. He received transfusions of blood and platelets.

While he was in the hospital he coughed up blood. There was concern that he had a pulmonary embolus. A ventilation perfusion lung scan was performed. There was also concern that he might have tuberculosis, since he had a positive PPD while he was in the Navy in 1990. He also had an ultrasound of his legs looking for blood clots. He had no evidence of a pulmonary embolus or deep venous thrombosis. He was also bronchoscoped during the admission. He was not told about where the source of bleeding was. Eventually, he stopped coughing up blood and his oxygen saturation improved.

While he was in the hospital he had a followup CT scan of the abdomen which looked the same as the one done three months before. Dr. Kindler thought that this was evidence that the chemotherapy was working because he was not worse. In addition, he had been requiring paracenteses approximately every four weeks. He had one done in late May or early June 2011. He did not have the next one done until he was hospitalized at the University of Chicago at the end of August. He has not had another paracentesis since late August.

Dr. Kindler recommended a change in chemotherapy. She thought that the Alimta was responsible for all of his problems. She recommended that he get cisplatin and gemcitabine.

He began his first course of chemotherapy with the new regimen in mid to late September. He received cisplatin and gemcitabine on day one. He received the chemotherapy on September 20. He was seen the following week. Blood work was done and his blood count was down. He did not get gemcitabine that day. In early to mid October he received a second course of treatment with cisplatin and gemcitabine. The next week his blood counts were too low to get the second dose of gemcitabine. He also needed a blood transfusion. He got one or two units. He received them in late October. He received a third course of chemotherapy with cisplatin and gemcitabine two weeks ago. One week later he had blood counts done again and he was again anemic. He received two units of blood in mid November.

Recently Dr. Dowell told him that he wanted Mr. Kelly to be re-evaluated by Dr. Kindler to determine what to do now. He is scheduled to see Dr. Kindler on December 14, 2011.

With each treatment with cisplatin and gemcitabine, the dosage of the medications was decreased. In spite of this, he continued to develop anemia.

He had abdominal pain early last year. After he had the first substantial paracentesis, the abdominal pain largely went away. He has only had occasional pain since then. He is not having pain at the present time. For the past three months his abdominal distention has been about the same.

He complains of getting short of breath with activity. He complains of shortness of breath carrying groceries in from the car. He gets short of breath climbing one flight of stairs. He has had shortness of breath since December 2010. The level of shortness of breath has been largely the same for the past 11 months. Within the last week he weighed 174 pounds. His lowest weight recently was 168 pounds. Two years ago he weighed about 197 to 200 pounds and his weight was stable. He is six feet tall. He describes his appetite as being okay.

Past Medical History

He has a history of diabetes. This diagnosis was made in the year 2000. At the time, he presented with symptoms of peripheral neuropathy. He felt like he was walking on hot coals. He was diagnosed with diabetes. He was put on medication at that time. He continues on oral hypoglycemic agents. He is on Prandin, Amaryl and Byetta. He also has a history of hyperlipidemia. He also has been diagnosed with gastroesophageal reflux disease and is on Prevacid. With the development of diabetes, he was put on lisinopril to protect his kidneys. He developed coughing from it and was switched to carvedilol. He remains on carvedilol. He is also on a thyroid medication. He is on Synthroid. He was given this because he was diagnosed with a goiter. As far as he knows, he is not hypothyroid. He was hospitalized for diverticulitis in 2006 or 2007 at Huguley Hospital in Ft. Worth. He was treated with intravenous antibiotics and antifungal agents. He was hospitalized about one year later for a second episode of diverticulitis requiring intravenous antibiotics.

Family History

His father died at age 55 of cancer of the kidney. His mother is still alive. She is 89 years of age. She has a pacemaker. He has a brother who is alive and well. His brother had malignant melanoma at age 12.

Work History

1969 – 1973

He went to the United States Naval Academy in Annapolis and graduated in 1973. In 1970 during the summer he spent one month on the USS Guadalcanal, an amphibious transport which transported marines and helicopters. This was a steam driven ship. He rotated through all aspects of the ship. He spent three or four days with the Boatswain's mates swabbing decks. He spent time on the bridge doing navigation. He spent time in the combat information center where there was radar and other electronics. He spent three or four days in the engineering spaces. He recalls standing watch. He is confident that repairs were being done while he was present, although has not specific recall of any particular repair being done, such as a repair to a valve or to a pump. He does not recall any repairs being done to a boiler. There were steam pipes all over the ship including in the birthing compartments.

In the summer of 1972 he again spent one month on the USS Guadalcanal. He was now paired up with junior officers. He rotated around the various jobs onboard the ship. He again spent time in the engine spaces. He estimates he spent about one week in the engine spaces.

In 1973 he was assigned to the USS Downes (DE/FF1070). He was assigned to the ship for two years. It was a Knox class frigate. This was a destroyer escort. This ship was outfitted with new fighting equipment including a surface-to-air missile launcher. There was also an infrared target tracking system on this ship. He was the "main propulsion assistant" on this ship. He was responsible for the boiler room. He was responsible for the shaft. He was responsible for the main engine and the engine room. He was responsible for the evaporators which produced fresh water. The boiler room had two boilers in it and all of its associated equipment. He was also responsible for the auxiliary room which had three Westinghouse turbogenerators. He spent his days down in those spaces.

For the first year he spent the great bulk of his time in the engineering spaces to learn how all of the equipment operated and to be able to recognize if there was a problem and what the consequences would be. He traced all of the steam lines in these compartments to see what they did. If something went wrong, he also directed the repairs. He was frequently present when others repaired valves, pumps and other equipment in the engine spaces, boiler spaces and auxiliary spaces. He was present when others

removed and replaced gaskets and packing on equipment. He was also present when the firesides of the boilers were repaired. This was with both boilers. The firebrick and mortar was removed. This was done at 32nd Street in San Diego. Most of the repairs that were done on this ship were done in San Diego at 32nd Street.

When he joined the ship, it was at the Long Beach Naval Shipyard. Electronics upgrades were being done at that time. Cables were being pulled throughout the ship during that period of time.

From 1975 to 1976 he went to Pensacola to become a naval flight officer. He was being taught to be a navigator/bombardier/weapon systems operator.

He was then transferred to North Island, San Diego to learn to fly S3 Viking antisubmarine aircraft. He was in San Diego for about six months. He was not exposed to asbestos on the planes.

He was then assigned to an S3 squadron in Jacksonville, Florida. He was there for about three years. He was there from approximately 1976 to 1979. He spent part of his time during this three year period on carriers assigned to S3 aircraft. He was assigned to the USS Independence (CV62) for a period of about five months.

During his time on the Independence, he spent every other day as part of the S3 crew. He spent every other day as part of the engineering department on the USS Independence. One of his responsibilities was to be sure that the damage control equipment was being maintained. This included the fire stations and oxygen breathing apparatuses. He spent a limited period of time in the engine rooms and boiler rooms. He doesn't specifically recall having to stand watch, but may have been required to do so.

He was subsequently assigned to the USS Dwight Eisenhower, also a carrier. He spent a little over one year on this ship. He continued to be air wing damage control officer on the USS Eisenhower. He spent most of his time doing activities related to flying.

1979 – 1982 He was assigned to the Naval Academy. He was responsible for 120 midshipmen.

1982 – 1984 He spent about 18 months in Jacksonville training crews to operate the S3 aircraft.

In 1984 he joined another squadron and spent about 18 months in total on the USS Saratoga. He was the operations officer for this squadron. This was an S3 squadron. When he was on the ship he slept onboard the ship. He did not spend time in the engine spaces.

From the fall of 1986 to the fall of 1989 he was stationed in the Pentagon. He started out as an aide to Admiral Stan Arthur. He then became an operations analyst.

In 1989 he was assigned to the USS Saipan, a helicopter carrier. He was the air officer for the amphibious squadron commander. He was on this ship for a period of about seven months. He did not spend time in the engine spaces.

In February 1991 he was assigned to the USS Nassau and was part of Operation Desert Storm. He did spend some time in the engineering spaces of the ship. He spent about three days.

From 1992 to 1994 he was transferred to Norfolk, Virginia where he was head of model simulation and analysis for the Operational Test and Evaluation Forces. This group was responsible for testing every new system that the Navy purchased. To his knowledge, he was not exposed to asbestos.

He retired from the Navy in 1994.

1994 – 1996 He got a Masters Degree in Systems Science at State University of New York at Binghamton. He continued in Binghamton going on for a Ph.D., although did not get a Ph.D.

1999 He went to work for a company in Seattle called Fans.net. It was an internet service. He was the CEO. The business went under around April 2000.

2000 – 2003 He worked for Lockheed Martin in New York. He was a systems analyst working on logistics modeling.

2003 – 2008 He transferred to Ft. Worth. He continued to work for Lockheed Martin on the Joint Strike Fighter.

2008 – present He has been working for Bell Helicopter as a logistics modeler. He is currently on short term disability. The last time he was in the office was in early June 2011.

Physical Examination

General: Blood pressure 130/66 in the right arm sitting. Pulse 68 per minute. Respirations 14 per minute. Oxygen saturation 98% on room air.

Head: Normocephalic with normal facial features.

Eyes: Pupils are round, regular and equal and react equally to light. Extraocular movements are intact.

Ears, Nose and Throat: No abnormalities noted.

Neck: Supple. Thyroid is not enlarged. There is no adenopathy.

Chest: There is adequate diaphragmatic movement bilaterally. Percussion is normal. On auscultation there are no rales, rhonchi or wheezes heard.

Heart: PMI is in the fifth intercostal space, midclavicular line. First and second heart sounds are normal. There is a Grade I-II/VI systolic ejection murmur along the lower left sternal border.

Abdomen: Soft and nontender. There is no organomegaly. There is a doughy feel to the abdomen. There is no definite fluid wave.
Extremities: There is no cyanosis, clubbing or edema. The peripheral pulses are adequate.

Review of Medical Records

Records of Huguley Memorial Medical Center in Fort Worth, Texas
A nuclear medicine hepatobiliary scan was done on January 21, 2010. It was done because of abdominal pain. There was prompt hepatic extraction of the radiotracer. Following the administration of a fatty meal, there was a satisfactory response by the gallbladder. It was considered a normal hepatobiliary nuclear medicine scan.

A CT scan of the chest was obtained on December 13, 2010, because of a chronic cough. There were no focal masses or adenopathy in the mediastinum or hilar areas. The heart size was normal. There was no pericardial effusion. There was a small nonspecific left pleural effusion. There were mild linear opacities involving the anterior and central right lung base due to subsegmental atelectasis. There were no focal infiltrates or nodules. There was ascites in the upper abdomen. It was found around the liver. There was diffuse moderate edematous thickening of the visualized omentum in the anterior abdomen.

A CT scan of the abdomen and pelvis was done on January 5, 2011. There was moderate diffuse free fluid throughout the abdomen and pelvis. It was increased around the liver since the recent examination. It was not seen on a CT scan of the abdomen in 2008. There was diffuse soft tissue

stranding and edematous thickening of the omentum along the anterior abdomen. There was a mildly enlarged lymph node within the thickened omentum in the right anterior mid abdomen. It measured 1.2 cm. There was no other significant adenopathy in the abdomen. There was a small stable cyst in the lower spleen.

Blood work was done on January 5, 2011. The BUN was 31 and the creatinine was 2.1.

An ultrasound-guided paracentesis was done in January 12, 2011; 1000 cc of yellow greenish fluid was collected. There were no immediate complications. The ascitic fluid amylase was 23, LDH 398, protein 1.4. The white blood count on the fluid was 82,600. The ascitic fluid culture was negative for bacteria.

The ascitic fluid cytology did not demonstrate malignant cells. Mesothelial cells were identified.

A CBC was done on January 12, 2011. The white blood count was 6800, hemoglobin 11.2, hematocrit 35.0, platelet count 407,000. The INR was 1.0.

A chemistry panel was obtained on January 12, 2011. The albumin was 3.2, protein 7.1, glucose 114, alkaline phosphatase 73, SGOT 18, SGPT 14, bilirubin 0.7, CEA 1.1.

I have reviewed a form dated January 12, 2011, indicating what medications Mr. Kelly was on. He was on Lasix, Amaryl, Prevacid, Synthroid, lisinopril, Micardis, Dulera, Pravachol, Prandin, exenatide, and Acarbose.

A CT scan of the chest was obtained on April 13, 2011. There was subsegmental atelectasis or scarring at the lung bases. There were no masses or nodules identified. There was no axillary, hilar or mediastinal adenopathy. There was a tiny left pleural effusion which was stable when compared to the prior CT scan dated December 13, 2010. There was no pericardial effusion.

An abdominal and pelvic CT scan was obtained on April 13, 2011. The liver, spleen, pancreas, gallbladder, kidneys and adrenal glands were unremarkable. There was a small hypodensity in the inferior aspect of the spleen unchanged from 2008. There was ascites noted throughout the abdomen and pelvis. There was soft tissue stranding within the omentum without any definite soft tissue masses. These findings worsened since the prior scan. The previously seen mildly enlarged lymph node within the mesentery was not appreciated. There was no adenopathy seen. The lung bases were clear.

Records of M.D. Anderson Cancer Center

Mr. Kelly was evaluated on May 3, 2011, by Karen Beaty, a physician assistant. Mr. Kelly was 59 years of age. He reported flu-like symptoms in late December 2010. He complained of increasing fatigue around Christmastime. He was thought to have a viral illness. A CT scan of the chest was done on December 13, 2010, which showed a small left pleural effusion and ascites. There was moderate diffuse edematous thickening of the omentum. He underwent a CT scan of the abdomen and pelvis on January 5, 2011, which showed moderate ascites and diffuse soft tissue stranding and

edematous changes in the omentum. He underwent a diagnostic paracentesis on February 22, 2011. No malignant cells were identified. In late March he had a CT-guided biopsy of the omental lesion. He was diagnosed with mesothelioma. He was seen by a medical oncologist. By this time he underwent two therapeutic paracenteses. He underwent another CT scan on April 13, 2011, which showed worsening ascites and omental soft tissue stranding compared to January. On the last paracentesis in mid April, six liters was removed. He complained of fatigue. He was not vomiting.

His last normal screening colonoscopy was in February 2010. He had a history of diabetes diagnosed in 2000. He was on medication and diet. He had a known increased creatinine. This was found when he was hospitalized for diverticulitis. He was followed by a kidney specialist and was stable. He was recently seen by a pulmonologist and was given inhalers. He did not have to use them since February 2011. He had a history of goiter. He had a squamous cell skin cancer removed in 2006. He was admitted in May 2005 and May 2007 for diverticulosis. He had an appendectomy in July 2007. He had an umbilical hernia repair in May 2007. He lost 13 pounds with the last paracentesis. He was a naval officer in the past. He now worked for Bell Helicopters as a system engineer. He had no history of intravenous drug use. He was a nonsmoker. His father was diagnosed with kidney cancer. He died at age 55. He had a brother who had melanoma at age 13. He was still alive. His mother was 88 years of age and alive. He was on Byetta, glimepiride, Prandin, carvedilol, Prevacid, Pravachol, and levothyroxine. On examination, the blood pressure was 134/78, pulse 72, respirations 18, weight 86.9 kg., Height 177 cm. The lungs were clear. There was no adenopathy. The abdomen was protuberant. It was soft and nontender. There was palpable fullness throughout. He had no cyanosis, clubbing or edema. Followup CT scans were recommended. They discussed tumor debulking along with heated intraperitoneal chemotherapy. This could only be offered if the creatinine was not high.

Center for Cancer and Blood Disorders in Fort Worth, Texas

Mr. Kelly was seen on February 22, 2011, because of ascites. He complained of mild abdominal distention. He had no pain or fever. On examination he was not in distress. The blood pressure was 108/77, pulse 85, respirations 16, height 6 feet, weight 195 pounds. The lungs were clear. Cardiac examination was normal. The abdomen was soft. There was mild to moderate ascites. Bowel sounds were heard. There were no palpable masses. He was diagnosed with ascites, diabetes, hyperlipidemia, hypertension, and history of diverticulitis. A paracentesis was recommended.

A chemistry panel was obtained on February 22, 2011. The albumin was 2.5, bilirubin 0.3, alkaline phosphatase 62, SGOT 13.

Included in the record is the cytology report dated February 22, 2011. Reactive mesothelial cells were identified. There was no evidence of malignant cells.

Included in the record is a report from Baylor All Saints Medical Center dated March 30, 2011. A CT-guided omental biopsy was performed.

I have reviewed a pathology report dated March 30, 2011, from the biopsy. Mr. Kelly had an epithelioid neoplasm consistent with malignant mesothelioma. The biopsy demonstrated fibrous tissue showing a proliferation of round epithelioid cells arranged in small clusters and having a

glandular or pseudoglandular arrangement. Immunohistochemical stains were performed. CK 5/6 and calretinin were positive. MOC 31 was negative.

I have reviewed a letter dated April 5, 2011, by Dr. Gautam. Mr. Kelly was 59 years of age. He was undergoing an evaluation for ascites. He underwent a peritoneal biopsy and was found to have malignant mesothelioma. Mr. Kelly did not have any new symptoms. He continued to have abdominal distention. His appetite was fair. He denied having fatigue, fever, chills, nausea, or vomiting. He had a history of diabetes, dyslipidemia, hypertension, diverticulitis, and hypothyroidism. He worked for Bell Helicopters as a systems engineer. He had a family history of cancer and melanoma. On examination, the blood pressure was 160/97, pulse 81, respirations 16, weight 195.4 pounds. There were normal breath sounds in the chest. The abdomen was mildly distended. There was no organomegaly. Free fluid was present. There was trace pedal edema. He had no stigmata of chronic liver disease. The plan was to refer him for oncology evaluation.

Mr. Kelly was evaluated by Dr. Ganesa, an oncologist, on April 15, 2011. Mr. Kelly was 59 years of age. He had symptoms of cough and fatigue in August 2010. It was thought that had a viral illness and he received several courses of antibiotics and steroids. He had a CT scan of the chest in December 2010 which showed a small left pleural effusion with basilar atelectasis. He also had ascites in the upper abdomen. This led to a CT scan of the abdomen in early January which showed fluid throughout the abdomen and pelvis. There was diffuse soft tissue stranding and edematous thickening throughout the omentum in the anterior abdomen. He had one enlarged lymph node seen in the thickened omentum. There were no focal masses. He underwent a CT-guided biopsy of the peritoneum on March 30, 2011, and was diagnosed with epithelioid mesothelioma. He had therapeutic paracenteses done. The last one was done three weeks previously. He had an extensive infectious disease workup which was negative. He had a 10 – 15 pound weight loss over the last six months. He complained of abdominal discomfort. He did not have chest pain or shortness of breath. He had a history of asbestos exposure in the 1970s, late 1980s, and early 1990s. The period of exposure was about seven or eight years. He with regard to his past medical history, he was diagnosed with diabetes in the year 2000. He also had a history of gastroesophageal reflux disease, hyperlipidemia, and hypothyroidism. He had an appendectomy in August 2007. He had local hernia repair in 2007. With regard to his family history, his father died of kidney cancer at age 52. He had a brother with melanoma diagnosed at age 12. His brother was now 62 years of age. He worked as a systems engineer at Bell. He was on levothyroxine, carvedilol, Byetta, Micardis, Pravachol, Acarbose, Prevacid, and glimepiride. On examination, he weighed 194 pounds, pulse 79, blood pressure 141/85. There was no adenopathy. The lungs were clear. Cardiac examination was normal. The abdomen was distended, compatible with ascites. There were no masses. There was no cyanosis, clubbing or edema. He was diagnosed with malignant mesothelioma involving the peritoneum. Treatment options were discussed. They talked about chemotherapy. They also talked about debulking surgery with hyperthermic chemotherapy. Referral to M.D. Anderson was recommended.

Records of Dr. Edward Baker
Dr. Baker is in practice in Crowley, Texas.

A CBC was done on April 26, 2007. The white blood count was 11,200, hemoglobin 12.1, hematocrit 35.8, platelet count 251,000.

A chemistry panel was obtained on April 26, 2007. The glucose was 74, BUN 22, creatinine 2.1, sodium 139, potassium 4.4, chloride 102, CO2 29, calcium 9.3, protein 7.4, albumin 4.1, bilirubin 0.7, alkaline phosphatase 69, SGOT 14.

A CT scan of the abdomen was obtained on April 27, 2007. There was linear opacity seen in the posterior right lung base consistent with atelectasis or scarring. There was significant stranding and fluid abutting the lateral border of the descending colon which extended from the level of the hepatic flexure down to approximately the level of the ileocecal valve of the cecum. The stranding and fluid extended along the right pericolic gutter to the level of the lower margin of the right lobe of the liver. There was a small amount of ascites seen adjacent to the liver extending to the dome of the liver. There was also small amount of free fluid in the pelvis. Inflammatory changes seemed to be centered along the descending colon but the appearance was nonspecific. There was no evidence of bowel obstruction. No free air was seen. There was no hydronephrosis. The liver, pancreas, adrenal glands, and kidneys were unremarkable.

A chemistry panel was obtained on October 22, 2007. The glucose was 99, BUN 27, creatinine 2.4, sodium 141, potassium 5.1, chloride 103, CO2 25, calcium 9.0, cholesterol 156, triglycerides 144, HDL 31, LDL 96, albumin 4.0, bilirubin 0.7, alkaline phosphatase 44, SGOT 10, SGPT 11.

A CBC was obtained on October 22, 2007. The white blood count was 10,600, hemoglobin 12.9, hematocrit 40.6, platelet count 444,000.

A CT scan of the abdomen and pelvis was obtained on October 23, 2007. The copy is poor and difficult to interpret. The amount of ascites was increased. There were changes consistent with a diffuse colitis. There was a possible splenic mass.

An abdominal CT scan was obtained on April 21, 2008. On the previous exam there were inflammatory changes adjacent to the colon in several areas. They were almost completely resolved. There were some residual inflammatory changes with fat stranding noted in the left pelvis adjacent to the sigmoid colon. The ascites was resolved. There was a splenic abnormality suggesting a mass which was unchanged. There were there was no evidence of any other focal mass or fluid collection. There was no evidence of retroperitoneal adenopathy.

A chemistry panel was obtained on January 4, 2011. The glucose was 160, creatinine 2.4, sodium 134, potassium 5.3, chloride 98, CO2 21, calcium 9.4, cholesterol 193, HDL 33, LDL 35, alkaline phosphatase 62, SGOT 12.

A chemistry panel was obtained on January 10, 2011. The glucose was 135, creatinine 1.9, sodium 130, potassium 4.2, chloride 105, CO2 25, calcium 8.3, protein 5.3.

Included in the record is a note dated June 24, 2011, by Dr. Jonathan Dowell. Mr. Kelly had newly diagnosed peritoneal mesothelioma. His chief complaint was abdominal swelling. His history dated back to December when he developed gradually increasing abdominal girth. He was diagnosed as having ascites. A biopsy was done in March and he was diagnosed with

mesothelioma. The pathology was also reviewed at M.D. Anderson. He was not a good candidate for tumor debulking with hyperthermic chemotherapy due to underlying renal insufficiency. His baseline creatinine was about 2. He was then referred to Dr. Hedy Kindler at the University of Chicago. She recommended systemic chemotherapy with carboplatin and Alimta or carboplatin and gemcitabine. Mr. Kelly had multiple paracenteses performed. The most recent one was one month previously. He also had a paracentesis two months ago. He complained of increasing abdominal girth and fatigue. He had no nausea or vomiting. He had occasional diarrhea. He had exposure to asbestos while working on a destroyer in the Navy in the early 1970s. His father had kidney cancer at age 53. He had a brother with melanoma at age 12. He had a paternal uncle with bladder cancer at age 75. On examination, the blood pressure was 144/86, height 6 feet, weight 194 pounds, pulse 82 per minute. The lungs were clear. There was no adenopathy. Cardiac examination was normal. The abdomen was soft but firm. There was significant distention and fluid wave. There was no hepatosplenomegaly. He had no edema. They discussed systemic chemotherapy. The physician told Mr. Kelly that the median survival in this setting was a little under two years. The plan would be to proceed with carboplatin and Alimta for three cycles. He would then return to the University of Chicago for restaging.

Records of Liver Consultants of Texas

Mr. Kelly was seen on January 26, 2011. He was seen for cough and chest tightness. He had a CT scan of the chest which showed possible peritoneal fluid. He had a CT scan of the abdomen which confirmed the presence of ascites. He had a diagnostic paracentesis. The cytology and culture were negative. He denied a history of abnormal liver function testing. He had history of diabetes for five years. He had hyperlipidemia for five years. He had a known positive PPD from the 1990s. He was diagnosed with chronic kidney disease and was being seen by nephrology. He worked as a systems engineer. He had a drink about once a week. He stopped 10 years previously. On examination the blood pressure was 124/78, weight 187 pounds, height 6 feet, pulse 106, respirations 18. The lungs were clear. Cardiac examination was normal. The abdomen was distended with ascites. The creatinine was 2.4, albumin 3.8, alkaline phosphatase 62, SGOT 12, SGPT 11, CEA 1.1. The amylase was 23. The cause of the ascites was unclear. Infectious disease evaluation was recommended.

Mr. Kelly was seen on February 22, 2011. He complained of mild abdominal distention without any pain or fever. On examination, the blood pressure was 108/77, pulse 85, respirations 16, height 6 feet, weight 195 pounds. The lungs were clear. The abdomen was soft. There was mild to moderate ascites. He was diagnosed with ascites of uncertain etiology. A paracentesis was recommended.

Review of interrogatories

I have reviewed set one. Mr. Kelly was born in August 1951. He graduated from the United States Naval Academy in Annapolis.

He was at the Naval Academy as a student from June 1969 to 1973. He attended classes. He was assigned to the USS Guadalcanal (LPH-7) as a student. He did this for about one month in 1970 and about one month in 1972. While at sea, he worked in a variety of capacities above and below deck. He stood watch in the boiler room and engine room. He participated in repairs. He performed

repairs to a Babcock and Wilcox boiler. He slept under pipes insulated with asbestos containing insulation.

From 1972 – 1975 he was at the Naval Training Center in San Diego as a trainee. He was also at the Naval Repair Facility in San Diego. He was at the Long Beach Naval Shipyard. He served on the USS Downes (DE-1070). At the Naval Training Center, he received training in operating, maintaining and repairing high-pressure steam systems. He learned to install packing and gaskets in valves, pumps, tanks, evaporators, and boilers. The hands-on portion of his training took place at the Naval Repair Facility on 32nd St.

He joined the USS Downes at the Long Beach Naval Shipyard while the ship was being refit and undergoing a weapons system upgrade. He stood watch and performed inspections during the installation of new weapons and electronics systems. He worked in proximity to electricians employed by Raytheon as they installed asbestos insulated wire. He was present while electricians employed by Raytheon installed control panels. They drilled into asbestos containing phenolic resin panels.

Mr. Kelly was responsible for operating and maintaining the auxiliary generators, the fire room and engine room. He performed inspections while underway and dispatched repairs to sailors. He worked in proximity to machinist mates as they removed and replaced original equipment asbestos containing packing and internal gaskets on valves and pumps. He also worked in proximity to machinist mates who were disassembling, repairing and maintaining steam traps. He worked in proximity to boiler technicians as they removed the original refractory material and insulation from a Combustion Engineering boiler. He worked in proximity to others who removed and replaced asbestos containing Flexitallic gaskets on high-pressure steam lines.

From 1975 to August 1976 he was a pilot at the Naval Air Station in Pensacola. He was then stationed at the Naval Air Station North Island in San Diego. He attended flight school. He learned about weapons systems. He also learned basic airplane maintenance. He was a navigator/bombardier. He performed preflight inspections on the airplanes.

From April – December 1977 he was in officer on the USS Independence (CV-62).

From January 1977 – 1980. He was assigned to the USS Dwight Eisenhower (CVN-69).

From 1980 – 1983 he was assigned to the US Naval Academy in Annapolis.

From 1983 – 1985, he was at the Naval Air Station in Jacksonville as a trainer.

From 1986 – 1987, he was assigned to the USS Saratoga (CV-60).

He performed supervisory work in the engineering spaces of aircraft carriers. He oversaw the maintenance and repair on damage control equipment, fire pumps, and oxygen generation canisters. He worked in close proximity to machinist mates who were cutting, removing and installing asbestos containing gaskets and packing. He was exposed to asbestos.

From 1987 – 1989, he worked in the Pentagon as an officer. He was unaware of asbestos exposure.

From 1989 – 1991, he was an officer on the USS Saipan (LHA-2) and the USS Nassau (LHA-4). He evacuated people from Liberia. He was unaware of asbestos exposure.

From 1991 – 1994, he was an analyst at the Operational Testing and Evaluation Center in Norfolk, Virginia. He was head of missile simulation analysis. He was unaware of asbestos exposure.

From 2000 – 2003, he worked for Lockheed Martin performing systems analysis and logistics modeling for helicopters. He was unaware of asbestos exposure.

From 2003 – 2008, he worked for Lockheed Martin as an analyst performing systems analysis and logistics modeling for fighter planes. He was unaware of asbestos exposure.

From 2009 – present, he worked for Bell helicopter in Fort Worth as a systems analyst. He was unaware of asbestos exposure.

Mr. Kelly participated in home improvement projects at his family residence in Chenango Bridge, New York. He assisted his father in installing vinyl flooring in the basement. His father cut asbestos-containing Armstrong tile. He assisted his father in reroofing their home. His father cut and applied and asbestos-containing Johns Manville roofing felt. He was exposed to asbestos.

Mr. Kelly owned a 1969 Triumph. He maintained and repaired this vehicle from 1970 – 1980. He removed the original equipment brakes and replaced them with asbestos containing brakes manufactured by Bendix. He also removed the original equipment asbestos containing exhaust manifold and carburetor gaskets. He put on a new Stromberg carburetor and carburetor gaskets.

Mr. Kelly came to my office with a large set of records which I copied and I will now summarize.

University of Texas Southwestern Medical Center
A CBC was obtained on June 21, 2008. The hemoglobin was 12.5, hematocrit 37.3, white blood count 8800, platelet count 275,000.

A chemistry panel was obtained on June 21, 2011. The sodium was 141, potassium 4.8, BUN 28, creatinine 2.11, calcium 8.6, albumin 3.8, SGOT 14, bilirubin 0.3.

He was seen on June 28, 2011. The blood pressure was 151/76, pulse 72, weight 183 pounds. He received carboplatin and Alimta that day.

A CBC was obtained in July 13, 2011. The white blood count was 1160, hemoglobin 9.8, hematocrit 30.4, platelet count 163,000.

A chemistry panel was obtained on July 13, 2011. The sodium was 139, potassium 5.3, chloride one await, CO2 26, glucose 205, BUN 25, creatinine 1.8, calcium 8.6.

Mr. Kelly was seen by Dr. Dowell July 18, 2011. Mr. Kelly complained of fatigue. He was diagnosed earlier in the year with malignant mesothelioma involving the peritoneum. He was not felt to be a candidate for tumor debulking and hyperthermic chemotherapy due to underlying renal insufficiency. He was seen at the University of Chicago by Dr. Kindler who recommended

systemic chemotherapy with carboplatin and Alimta if his renal function would allow it. He received his first cycle three weeks previously and now presented for cycle #2. He tolerated the first cycle well. His main complaint was fatigue which occurred throughout the cycle. He developed a blotchy rash over his trunk, back, and face in the second week. He was treated with Benadryl and some topical lotion. He also developed some mouth ulcers. On examination, the blood pressure was 152/87, pulse 85, respirations 18, weight 183 pounds. There was no adenopathy. The lungs were clear. Cardiac examination was normal. The abdomen was mildly distended. There was a positive fluid wave. No masses were palpated. There was no cyanosis, clubbing or edema. The plan was to proceed with the second cycle of chemotherapy. It was recommended that he return to the University of Chicago after the third cycle of treatment for reimaging.

A CBC was obtained on July 18, 2011. The white blood count was 4000, hemoglobin 9.9, hematocrit 29.1, platelet count 423,000.

A chemistry panel was obtained on July 18, 2011. The sodium was 139, potassium 4.9, chloride 105, CO2 24, BUN 24, creatinine 1.84, glucose 196, calcium 8.8, albumin 3.3, protein 6.4, bilirubin 0.2, alkaline phosphatase 51, SGOT 20.

A CBC was obtained on August 9, 2011. The white blood count was 4900, hemoglobin 7.3, hematocrit 21.8, platelet count 234,000.

A chemistry panel was obtained on August 9, 2011. The sodium was 137, potassium 4.5, chloride 103, CO2 27, BUN 28, creatinine 2.2, glucose 149, calcium 8.8, albumin 3.2, protein 5.9, bilirubin 0.2, alkaline phosphatase 65, SGOT 26.

Mr. Kelly was seen by Dr. Dowell on August 16, 2011. He completed two cycles of carboplatin and Alimta. He complained of mild fatigue. He was being seen to determine whether he should receive the third cycle. On examination, the pulse was 78, blood pressure 141/79, respirations 18, weight 189 pounds. There were slightly diminished breath sounds at both bases. Cardiac examination was normal. The abdomen was moderately distended. There was a positive fluid wave. There were no masses in the abdomen and the abdomen was nontender. There was 1+ pretibial edema bilaterally. The creatinine was 2.2. The hemoglobin was almost 7. He was diagnosed with anemia probably due to chemotherapy and had some worsening renal function. It was recommended that he get two units of packed red blood cells and get his renal function rechecked. The decision about giving the third cycle was deferred.

Mr. Kelly was seen on October 11, 2011, by Dr. Dowell. He received cycle one of carboplatin and gemcitabine three weeks ago. He was unable to receive day eight due to cytopenias. He also received a blood transfusion the past weekend. He complained of mild fatigue. On examination, the blood pressure was 133/72, pulse 72, weight 179 pounds, height 6 feet. The white blood count was 3000, hemoglobin 10.9, platelets 257,000. Because of neutropenia, the second course of chemotherapy was delayed. Dosage reduction was recommended.

I have reviewed a note dated October 11, 2011, by a nurse practitioner. Mr. Kelly was better following the blood transfusion. He had alternating constipation and diarrhea. On examination, the

blood pressure was 133/72, pulse 72, respirations 18, weight 179 pounds. There was no adenopathy. The lungs were clear. The abdomen was slightly distended. The abdomen was soft and nontender. There was no cyanosis, clubbing, or edema. He was diagnosed with peritoneal mesothelioma. He tolerated carboplatin and gemcitabine fairly well. He was not able to receive day 8 of gemcitabine due to neutropenia. He received a blood transfusion a few days ago with improvement in the hemoglobin. The plan was to wait one week to allow the bone marrow to recover.

I have reviewed a list of medications dated October 11, 2011. Mr. Kelly was on Atarax, Norvasc, Coreg, folic acid, Zofran, Compazine, Prevacid, Pravachol, Synthroid, exenatide, glimepiride, and Prandin.

A chemistry panel was obtained on October 11, 2011. The sodium was 138, potassium 5.1, chloride 104, CO2 24, BUN 31, creatinine 2.32, glucose 214, calcium 9.1, albumin 3.8, protein 6.7, bilirubin 0.4, alkaline phosphatase 77, SGOT 28.

Mr. Kelly was evaluated on November 8, 2011, by Dr. Dowell. The blood pressure was 125/75, pulse 77, height 6 feet, weight 180 pounds.

A CBC was obtained on November 8, 2011. The white blood count was 3700, hemoglobin 9.1, hematocrit 25.7, platelet count 235,000.

A chemistry panel was obtained and November 8, 2011. The sodium was 140, potassium 4.7, chloride one await, CO2 26, BUN 35, creatinine 2.36, glucose 63, calcium 8.7, albumin 3.8, protein 6.6, bilirubin 0.3, alkaline phosphatase 65, SGOT 25.

Records of the University of Chicago Medical Center

I have reviewed a consultation note dated June 8, 2011, by Dr. Hedy Kindler. Mr. Kelly was being seen in the mesothelioma clinic. He was 59 years of age. He first presented in December 2010 with flu-like symptoms associated with a nonproductive cough. A CT scan of the chest showed a small left pleural effusion and a thickened and edematous omentum. He had a followup CT scan of the abdomen and pelvis which demonstrated moderate ascites along with stranding and edema in the omentum. He was seen by a liver specialist in February 2011 and had a diagnostic paracentesis done. Cytology demonstrated reactive mesothelial cells. A CT-guided biopsy of the omentum was done on March 30, 2011. The findings were consistent with epithelioid malignant mesothelioma. The malignant cells were positive for calretinin and CK 5/6 and negative for MOC-31 and CEA. He had a repeat CT scan of the abdomen in April which showed worsening ascites and omental soft tissue stranding. He was evaluated in May 2011 at M.D. Anderson Cancer Center. A CT scan of the chest showed stable nonspecific nodular densities. A CT scan of the abdomen and pelvis showed a large amount of fluid and prominent cystic areas measuring 7.4 x 6.3 cm in the inferior aspect of the spleen. There were also some small anterior diaphragmatic lymph nodes. Mr. Kelly was told that surgical debulking alone or together with hyperthermic intraperitoneal chemotherapy with cisplatin were not good options because of the extent of his disease and his poor kidney function. Systemic chemotherapy was recommended and he was referred to the University of Chicago to discuss his options. Mr. Kelly complained of significant abdominal distention but he was able to do his daily activities. He reported mild fatigue. He indicated that he was at 75% of his

baseline energy level. He was continuing to work. He was on exenatide, Coreg, glimepiride, Prevacid, Synthroid, Prandin, and Pravachol. He had a history of type 2 diabetes, hypercholesterolemia, chronic kidney disease stage III, hypertension, hypothyroidism, history of an appendectomy and a hernia repair. His father had renal cancer. He had a brother with melanoma. He had a paternal uncle with bladder cancer. He was in the engineering officer in the Navy in the 1970s and worked primarily in shipyards. He was now working as a systems engineer. On examination, he weighed 87.5 kg, pulse 84, respirations 18, blood pressure 170/97. There was no adenopathy in the neck. The lungs were clear. There were no crackles or wheezes. Cardiac examination was normal. The abdomen was distended. Bowel sounds were normal. There was no organomegaly. There was a prominent fluid wave. There was no cyanosis or edema. Mr. Kelly was diagnosed with peritoneal mesothelioma. Systemic chemotherapy with carboplatin and Alimta was recommended if his renal function worsened. Dr. Kindler recommended treatment with gemcitabine and carboplatin. She further indicated that depending on his response to chemotherapy, the option of surgical debulking might be revisited in the future. He also needed intermittent therapeutic paracenteses. Mr. Kelly indicated that he wanted to be treated closer to home. He was given the name of Dr. Jonathan Dowell at the University of Texas Southwestern.

A CT scan of the chest was obtained on August 24, 2011. There was ground glass opacity within the right middle lobe and the lower lobes bilaterally, greater on the right than the left. There was mild basilar septal thickening in the areas of ground glass opacity bilaterally. There were a few peripheral peribronchial irregular nodules in the right middle lobe laterally. There were trace pleural fluid collections bilaterally, greater on the left than the right. There was ascites and diffuse peritoneal fat stranding in the upper abdomen.

A CT scan of the pelvis was done on August 24, 2011. There were small obturator and distal external iliac nodes that were not pathologic by size criteria. They were unchanged from the prior CT scan in May 2011. There was ascites which filled the pelvis. There was a rim of solid nodular tumor in the omentum in the lower abdomen but not in the pelvis. It was measured in two areas. It was measured just below the origin of the inferior mesenteric artery. It was 1.6 cm thick. It was similarly thick on imaging on May 4, 2011. Measurement was also done near the umbilicus. It was 1.2 cm thick and was essentially identical on the May 4, 2011, CT scan. There was colonic diverticulosis.

I have reviewed a note dated August 29, 2011. He presented with acute renal failure and pancytopenia. He received two units of red blood cells the day before. He subsequently experienced chest tightness and shortness of breath. His EKG was normal. Cardiac enzymes were normal. His blood pressure was elevated at 178/83. He was given Lasix. On examination he had bibasilar crackles. There was no wheezing. Cardiac examination was normal. He had no lower extremity edema. The sodium was 144, potassium 3.8, chloride 109, CO2 20, BUN 21, creatinine 2.0, glucose 131, calcium 7.5, phosphorus 2.3, and magnesium 1.2. A CBC was obtained. The white blood count was 11,600, hemoglobin 10.5, hematocrit 30.8, platelet count 53,000. He was diagnosed with shortness of breath. This was thought to be due to pulmonary congestion. There was concern that he had a pulmonary embolus. The pancytopenia was resolving. The anemia was improved with blood. His creatinine was now close to baseline.

Chest films were obtained on August 29, 2011. There was subsegmental atelectasis identified. There was focal eventration of the right hemidiaphragm. The heart size was normal.

A nuclear medicine ventilation perfusion scan was performed on August 29, 2011. The ventilation images showed asymmetric activity in the upper lung zones but became equilibrated on progressive wash-in images. There was mild xenon retention at the lung bases. Perfusion images showed multiple small subsegmental perfusion defects. Many were basilar and were partially matched to the mild retention. The test was interpreted as demonstrating a low probability for a pulmonary embolus.

An echocardiogram was done on August 30, 2011. The right ventricular size was normal. Right ventricular performance was normal. The right ventricular systolic pressure was elevated consistent with pulmonary hypertension. The left ventricle was normal in size. There was normal left ventricular thickness. Left ventricular diastolic performance was abnormal for his age. The left ventricle was hyperdynamic. The left ventricular ejection fraction was 75%. There were no wall motion abnormalities.

A duplex ultrasound was done of the lower extremities on August 30, 2011. There was no evidence of deep venous thrombosis.

Chest films were obtained on August 30, 2011. There was a right chest port in place. The cardiac silhouette was normal. It was elevation of the right hemidiaphragm. There were linear opacities at the lung bases consistent with atelectasis.

I have reviewed a nephrology followup note dated August 31, 2011. The creatinine was stable. His blood counts were improving. On examination the lungs were clear. Cardiac examination was normal. The abdomen was nontender. The creatinine was 2.1 and the BUN was 19. The white blood count was 4600, hemoglobin 8.7, platelet count 45,000. He was diagnosed with an acute kidney injury superimposed on chronic kidney disease which was resolving.

I have reviewed an oncology followup note dated August 31, 2011. He was admitted with acute renal failure and pancytopenia. He now had increasing shortness of breath and need for oxygen. He was coughing up less blood. He complained of tightness of his chest overnight. He was on Lovenox for a presumed pulmonary embolus. An echocardiogram showed pulmonary hypertension. Pulmonary consultation was recommended. The white blood count was 16,500, hemoglobin 10.3, hematocrit 30.6, platelet count 52,000.

I have reviewed a cytology report dated August 31, 2011, from the ascites. Malignant cells were seen immunohistochemically consistent with malignant mesothelioma. CK 7, EMA and calretinin were positive

An arterial blood gas was obtained on September 1, 2011. The pO2 was 116, pCO2 45, pH 7.40.

I have reviewed a pulmonary consultation note dated September 1, 2011. Mr. Kelly was 59 years of age. He was a nonsmoker. He had a history of diabetes, chronic kidney disease, hypertension and had peritoneal mesothelioma. He received three cycles of chemotherapy. The last dose of Alimta was on August 11. He presented to the University of Chicago Medical Center on August 24

with acute renal failure and pancytopenia. He first presented in Texas with flu-like symptoms and fatigue in October 2010. He saw a pulmonologist for chronic cough which did not resolve. This led to a CT scan of the chest which demonstrated ascites. He had a CT-guided omental biopsy which demonstrated epithelioid mesothelioma. A CT scan in Texas showed a small left pleural effusion. He had a repeat CT scan of the chest at M.D. Anderson Cancer Center on May 4, 2011, which showed stable nonspecific nodular densities. He was seen by Dr. Kindler who was coordinating his oncologic care. He received chemotherapy. On August 10 he needed to be transfused with blood. He drove from Texas to the University of Chicago Medical Center for evaluation. He noted some minor epistaxis during the drive and then was bleeding persistently after a venipuncture. His lab values showed pancytopenia and he was admitted to the hospital. He was given packed red blood cells, platelets and Neupogen. His blood counts improved. His white blood count rose from 700 up to 21,000. His hemoglobin rose from 8.1 up to 10.3. His platelet count started at 7000 and rose to 52,000. On August 26 he noted a postnasal drip and a sore throat. He had mild substernal chest pressure which progressed over the weekend. He developed a small amount of substernal chest pain. He was coughing up sputum mixed with bright red blood. After receiving blood on August 28, he was found to be hypoxemic. His EKG was normal. Troponins were measured and were negative. A chest x-ray was negative for pneumonia. He was thought to possibly be volume overloaded and was given Lasix. He continued to have chest tightness and blood-tinged sputum. He required oxygen. A ventilation perfusion scan was negative for pulmonary embolus. He had been started on heparin anyway. He was then switched to Lovenox. An echocardiogram showed pulmonary hypertension. A repeat CT scan of the chest showed some small airspace nodules in the right middle lobe and areas suspicious for early bronchopneumonia. He had weight loss since starting chemotherapy. He also had some low-grade fever. He never had hemoptysis in the past. With regard to his past medical history, he had diabetes, hypercholesterolemia, chronic kidney disease, hypertension, and hypothyroidism. On examination, the blood pressure was 120-154/64-106, pulse 66-84, oxygen saturation 93 – 98%. The heart rhythm was regular. There was a pronounced S1. There were no gallops. There was slight dullness to percussion at the right base. There were bibasilar crackles. Various CT scans, chest x-rays and the echocardiogram were reviewed. He was diagnosed with hypoxia. The differential included infection, infarction, hypoventilation, ventilation perfusion mismatching, or shunt. Bronchoscopy with alveolar bronchoalveolar lavage was recommended.

I have reviewed a pulmonary followup note dated September 2, 2011. Mr. Kelly was moderately sedated but oriented. He denied being in any acute distress. The heart rhythm was regular. There were no gallops. There was slight jugular venous distention. The lungs were clear. The ascitic fluid cytology showed reactive mesothelial cells. The protein in the ascites was 3.4. He was diagnosed as having hypoxemia and was on 2 L of oxygen per minute. He had pulmonary hypertension. He had pancytopenia. He also had chronic kidney disease. He was diagnosed with community acquired pneumonia in an immunocompromised host.

I have reviewed a laboratory report dated September 2, 2011. Bronchoalveolar lavage was performed and the fluid was analyzed. The total count in the fluid was 1425. The white blood count was 174 with 66% neutrophils and 26% macrophages.

A chemistry panel was obtained a September 2, 2011. The glucose was 172, sodium 138, potassium 4.2, chloride 103, CO2 27, BUN 25, creatinine 2.4, calcium 8.0, phosphorus 2.8, magnesium 1.9.

A CBC was obtained on September 2, 2011. The white blood count was 11,300, hemoglobin 10.1, hematocrit 30.7, platelet count 53,000.

Records of M.D. Anderson Cancer Center

I have reviewed a pathology report dated April 22, 2011, by Dr. Nelson Ordonez. Outside slides were reviewed. An epithelioid neoplasm was identified consistent with malignant mesothelioma. The tumor cells were diffusely positive for calretinin. They were focally positive for cytokeratin 5/6. The cells were negative for MOC-31 and CEA. The morphologic features of the tumor and the immunohistochemical profile was consistent with a diagnosis of malignant epithelioid mesothelioma.

Chest films were obtained on May 3, 2011. The lung volumes were low. There was bilateral lower lung subsegmental atelectasis. There was no evidence of a pneumothorax. The heart size was normal. There was no evidence of intrathoracic metastatic disease.

A CT scan of the chest was obtained on May 4, 2011. It was compared to an outside CT scan dated December 13, 2010. There were some nonspecific mediastinal lymph nodes. There was a subcarinal lymph node measuring 1.9 x 0.9 cm. It did not change much compared to the prior CT scan. There were some small anterior diaphragmatic lymph nodes which were stable. There were some small retrocrural lymph nodes which were stable. One of the lymph nodes measured 1.2 x 0.7 cm. There were some middle diaphragmatic lymph nodes that were slightly more prominent. There was no pleural effusion. There was a small nodular density seen in the right upper lobe on image 57. It was probably not changed when compared to the prior chest CT scan. There were linear areas of opacity possibly representing atelectasis.

A chemistry panel was obtained on May 3, 2011. The protein was 5.8, albumin 3.8, calcium 8.8, phosphorus 4.2, glucose 102, BUN 36, creatinine 1.98, bilirubin 0.2, alkaline phosphatase 74, sodium 138, potassium 5.0, chloride 106, CO2 24, magnesium 2.2.

A CBC was obtained on May 3, 2011. The white blood count was 6700, hemoglobin 11.3, hematocrit 35.1, platelet count 275,000.

A CT scan of the abdomen and pelvis was obtained on May 4, 2011. It was compared to previous studies obtained on January 5, 2011 and April 13, 2011. There were no lesions in the liver. There was probably a low density implant in the subhepatic space and there was perihepatic fluid. The spleen was prominent inferiorly and there was a heterogeneous low density that appeared nodular in the inferior aspect of the spleen. There were also some cystic appearing areas. These changes were stable. A metastasis was possible. The adrenal glands, pancreas and right kidney showed no focal lesions. There were tiny hypodensities in the lower pole of the left kidney. There were some small anterior diaphragmatic lymph nodes which were stable since April but increased from January. One measured 6 mm. It previously measured 4 mm. There was a middle diaphragmatic lymph node which was tiny and not changed. There were some slightly prominent external iliac

lymph nodes which were about the same size. There was a large amount of intraperitoneal fluid which was similar to the April scan. There was infiltration in the omentum. There were peritoneal implants. There were serosal areas of disease. The omental infiltration was either unchanged or slightly increased. When compared to the January scan, there was considerably more fluid. There was an implant adjacent to the colon on image 210 which appeared slightly increased in size compared to January. There were some nodular areas along the peritoneum seen on image 297 on the right side which were about the same as in January. There were some prominent mesenteric lymph nodes which were stable.

Diagnoses

1. Peritoneal mesothelioma
2. Pancytopenia secondary to chemotherapy
3. Diabetes mellitus
4. Chronic kidney disease
5. History of hyperlipidemia
6. History of hypertension
7. Hypothyroidism
8. History of diverticulitis

Discussion

Mr. Kelly developed what he thought was a cold in August 2010. He had coughing and aching. He was given an antibiotic by his primary care physician, but did not get better. In October 2010, he was referred to a pulmonologist. He had a CT scan of the chest performed which demonstrated a small left pleural effusion. He was also found to have ascites and a thickened and edematous omentum. He then had an abdominal and pelvic CT scan performed which demonstrated ascites. It was increased around the liver compared to the CT scan of the chest. There was diffuse soft tissue stranding and edematous thickening of the omentum in the anterior abdomen.

On January 12, 2011, an ultrasound-guided paracentesis was performed. The cytology demonstrated mesothelial cells. No malignant cells were identified.

Mr. Kelly was sent to a liver specialist for evaluation. He was not diagnosed with liver disease. The cause of the ascites was not clear.

In late February 2011, a second paracentesis was performed. Again no diagnosis was made.

On March 30, 2011, a CT-guided omental biopsy was performed at Baylor All Saints Medical Center. He was diagnosed with peritoneal epithelial mesothelioma.

Mr. Kelly was referred for oncologic evaluation in mid April 2011. Therapeutic options were discussed including chemotherapy. It was recommended that he be evaluated at M.D. Anderson Cancer Center.

Mr. Kelly was evaluated at M.D. Anderson in early May 2011. The tissue from the omental biopsy was reviewed by Dr. Nelson Ordonez and the diagnosis of peritoneal epithelioid mesothelioma was confirmed. He had followup CT scans performed. He was not considered a candidate for aggressive surgery and intraoperative heated chemotherapy because he had chronic kidney disease. He was referred to Dr. Hedy Kindler at the University of Chicago for further evaluation.

Mr. Kelly was seen by Dr. Kindler on June 8, 2011. Dr. Kindler thought that he should receive chemotherapy with carboplatin and Alimta. She recommended that he received three courses of chemotherapy and then be reevaluated. Mr. Kelly indicated that he wanted to be treated closer to home. Mr. Kelly was given the name of Dr. Jonathan Dowell at the University of Texas Southwestern for treatment.

Mr. Kelly was seen by Dr. Dowell and was begun on chemotherapy with carboplatin and Alimta in late June 2011. He developed fatigue from the first course of chemotherapy. He received the second cycle of chemotherapy on July 18, 2011 and the third cycle of chemotherapy on August 11, 2011. He developed nausea, mouth sores and fatigue from the chemotherapy.

Mr. Kelly then decided to drive to the University of Chicago for his reevaluation. During the drive he developed epistaxis. When he arrived at the University of Chicago, blood work was done and he had a significant amount of bleeding from the site where the blood was drawn. He was found to be severely pancytopenic and was hospitalized. He received blood transfusions and platelet transfusions during the hospitalization. He also received Neupogen. During the hospitalization he became very short of breath. No specific diagnosis was made as to the cause of his shortness of breath. At least at one point he was thought to be fluid overloaded. During the hospitalization it was recommended that chemotherapy be continued with carboplatin and gemcitabine. A followup CT scan of the abdomen looked about the same. Dr. Kindler concluded that the chemotherapy was working since he was not worse. He also was not requiring repeat paracenteses.

Mr. Kelly returned to Texas and received the first course of chemotherapy with carboplatin and gemcitabine in September 2011. He was unable to receive day 8 of gemcitabine because of cytopenias. He received a second course of chemotherapy in October 2011. He received a third course of chemotherapy two weeks before I saw him. He again developed anemia and received blood transfusions.

Mr. Kelly does not have a curable illness. He will ultimately die of complications of this malignancy.

There is only one known cause of malignant mesothelioma in man that is prior asbestos exposure. This relationship was identified in 1960. Since then many studies have clearly demonstrated that individuals exposed to asbestos are at risk for this otherwise very rare malignancy.

I obtained a work history from Mr. Kelly. He started at the United States Naval Academy in Annapolis in 1969. In the summer of 1970, he spent one month on the USS Guadalcanal, an amphibious transport. The ship transported Marines and helicopters. He told me it was a steam driven ship. He rotated through all areas of the ship. He spent three or four days in the engineering spaces standing watch. Repairs were being done while he was present, although he did not recall any specific repairs that were done. He recalled that there were steam pipes all over the ship, including the berthing compartments.

In the summer of 1972, he spent one month on the USS Guadalcanal. He paired up with junior officers and rotated around various jobs on the ship. He again spent time in the engineering spaces. He estimated it was one week.

In 1973, he was assigned to the USS Downes after he graduated from the Naval Academy. The ship was a destroyer escort outfitted with surface to air missiles. He was assigned to the ship for two years. He was the "main propulsion assistant" on the ship. He told me he was responsible for the boiler room. He was responsible for the main engine and the engine room. He was also responsible for the evaporators. He was also responsible for the auxiliary room which had turbo generators. He spent time in all of the spaces.

During the first year on the ship, he spent the great bulk of his time in the engineering spaces in order to learn how all of the equipment operated and to be able recognize a problem. He traced all of the steam lines in these compartments to determine what they did. He also directed repairs if something went wrong. He informed me that he was frequently present when others repaired valves, pumps and other equipment in the engine spaces, boiler spaces and auxiliary spaces. He was present when others removed and replaced gaskets and packing. He was present when the fire side of the boilers was repaired. There were two boilers on the ship and he was present when both were repaired. This included removing fire brick and mortar. Most of the repairs were done while the ship was in San Diego at 32nd St.

When he first joined the ship, it was at the Long Beach Naval Shipyard undergoing an upgrade. Electronics upgrades were being done. Cables were being pulled through the ship.

From 1975 – 1976, he was transferred to Pensacola, Florida to become a naval flight officer. He was taught to be a navigator/bombardier/weapons systems operator. He then transferred to North Island, San Diego to learn to fly S3 Viking anti-submarine aircraft.

From 1976 – 1979, he was assigned to an S3 squadron in Jacksonville, Florida. He spent approximately five months on the USS independence (CV62). During the five months, he spent every other day as part of the S3 crew. He spent the other half of his time as part of the engineering department on the USS Independence. One of his responsibilities was to be sure that the damage

control equipment was maintained. He spent a limited period of time in the engine rooms and boiler rooms. He did not recall having to stand watch.

He spent a little over one year on the USS Dwight Eisenhower, a carrier. He was the air wing damage control officer. He spent most of his time involved with flying.

From 1979 – 1982, he was assigned to the Naval Academy.

From 1982 – 1984, he spent 18 months in Jacksonville training crews to operate the S3 aircraft.

In 1984, he was assigned to another squadron. He spent about 18 months on the USS Saratoga as the operations officer for the S3 squadron. He slept onboard the ship. He did not spend time in the engine spaces.

From 1986 – 1989, he was assigned to the Pentagon.

In 1989, he was assigned to the USS Saipan, a helicopter carrier. He was the air officer for the amphibious squadron commander. He spent seven months on this ship. He did not spend time in the engine spaces.

In February 1991, he was assigned to the USS Nassau and was part of Operation Desert Storm. He spent some time in the engineering spaces.

I have also reviewed the interrogatories which indicate that Mr. Kelly participated in home improvement projects at his family's residence in New York. He assisted his father in installing vinyl flooring in the basement. He assisted in installing a new roof and work with roofing felt. He also did some automotive repair from 1970 – 1980. He replaced brakes and gaskets on a vehicle.

All of Mr. Kelly's asbestos exposure should be considered a contributing factor in the development of his malignancy.

In summary, Mr. Kelly has been diagnosed with peritoneal mesothelioma. It was caused by prior occupational and paraoccupational exposure to asbestos. He will ultimately die of complications of this malignancy.

Thank you for referring Mr. Kelly for my evaluation.

Sincerely,

Barry R. Horn, M.D.

BRH:bh:dpf